00000000000000000000000000000000000000	00000000 00000000 00000000		88888888888888888888888888888888888888	RRRR RRRR	RRRRRRRR RRRRRRRR RRRRRRRR		LLL LLL LLL
	000 000	000 000	888 88 888 88	B RRR B RRR	RRR RRR	TTT TTT	LLL
222	000	000	888 BB	B RRR	RRR	TTT	
CCC	000	000	<b>888</b> 88	B RRR	RRR	TTT	LLL
333	000	000	BBB BB	B RRR	RRR	111	LLL
CCC CCC	000 000	000 000	888 888888888888		RRR RRRRRRRR		LLL
CCC	000	000	<b>BBBBBBBBBBB</b>		RRRRRRRR	iii	iii
CCC	000	000	B8888888888	RRRR	RRRRRRRR	TTT	LLL
CCC CCC	000	000	<b>BBB BB</b>		RRR	<b>TTT</b>	III
	000 000	000 000	888 88 888 88	B RRR B RRR	RRR RRR		
CCC	000	000	<b>888</b> 88		RRR	ήij	ili
CCC	000	000	<b>BBB</b> BB	B RRR	RRR	TTT	iii
	000	000	BBB BBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBB		RRR	ŢŢŢ	
00000000000000000000000000000000000000	00000000		B8888888888888888888888888888888888888	RRR RRR	RRR RRR	† † † † † † † † † † † † † † † † † † †	
000000000000000000000000000000000000000	0000000		8888888888	RRR	RRR	ΪΪΪ	

)))))))) () () () () () () () () () () (	000000 000000 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00	BB8BBBBB BB8BBBBB BB BB BB BB BB BB BBBBBBBB	CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC	NN         NN           NN         NN           NN         NN           NNNN         NN           NNNN         NN           NN         NN           NN         NN           NN         NNNNN           NN         NN           NN         NN	EEEEEEEEEEEEEEEEEEEEEEEEEEEEEEEEEEEEEE	
		\$				

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0026
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0028
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0031
0032
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0044
0045
0046
0047
0048
0049
0050
```

0051 0052

0054

0055 0056

```
10
                                                 16-Sep-1984 00:01:01
                                                 14-Sep-1984 12:10:24
0001
      O MODULE COBSCANCEL (
0002
                        IDENT = '1-014'
                                                ! FILE: COBCANCEL.B32 EDIT:LB1014
      Ŏ
                        ) =
0004
       BEGIN
0005
0006
0007
8000
            COPYRIGHT (c) 1978, 1980, 1982, 1984 BY
0009
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0010
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0011
0012
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            AND SHOULD NOT BE CONSTRUED AS A COMMITMENT BY DIGITAL EQUIPMENT
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            DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE OR RELIABILITY OF ITS
0024
            SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.
0025
        i 🛊
        i 🛊
         FACILITY:
                        COBOL SUPPORT
          ABSTRACT:
                        This procedure closes all open files related to the program
                        that is being cancelled, and restores any existing local
                        storage to its initial values.
          ENVIRONMENT: Vax-11 User Mode
```

AUTHOR: MLJ , CREATION DATE: 10-APR-1979

## MODIFIED BY:

1-001 - Original. MLJ 10-APR-1979

1-002 - Added boilerplate and comments. RKR 18-JULY-1979 1-003 - Added allocation and deallocation of event flag (EF).

1-004 - Declare psects via macros. RKR 11-SEPT-79

1-005 - Get image file definitons from 'RTLLIB' and psects from 'RTLIN:RTLPSECT' RKR 18-SEPT-79

1-006 - Make it call COB\$\$RESTVA instead of SYS\$RESTVA. RKR 24-SEPT-79 1-007 - Signal COB\$ NAMNOTLIN if COB\$\$FIND NAME fails. RKR 2-0CT-79 1-008 - Status check and cosmetic changes. RKR 18-0CT-79

1-009 - Add code to close files that the subject routine has open at this point. RKR 19-0CT-79

1-010 - Add error message on path where COB\$\$FINDNA returns a 0. RKR 21-OCT-79

1-011 - Changed code for accessing FAB from RAB. Changed signalling behavior to signal only COBS\_CANFAIL.

COBSCANCEL	F 10
1-014	16-Sep-1984 00:01:01
58 59 60 61 62 63 64 65	0058 1   RKR 29-OCT-79 0059 1   1-012 - Added abstract, functional description and comments and made 0060 1   some cosmetic changes. LB 02-MAR-81 0061 1   1-013 - Added EDIT field for checkin's audit trail. LB 29-JUL-81 0062 1   1-014 - Added LIB\$STOP as external routine. LB 30-NOV-81 0063 1   0064 1

Page 2 (1)

```
SWITCHES
  0070
                                   SWITCHES ADDRESSING_MODE (EXTERNAL = GENERAL, NONEXTERNAL = WORD_RELATIVE);
                                  ! LINKAGES
                                                -NONE
                                  ! TABLE OF CONTENTS:
                      0081
                     0082
                                  FORWARD ROUTINE
                      0084
                                                COB$CANCEL : NOVALUE :
                      0085
                     0086
0087
0088
                               INCLUDE FILES
                      0089
                      0090
                                  ! NOTE this module cannot be in sharable library.
                      0091
                                  REQUIRE 'RTLIN:RTLPSECT';
LIBRARY 'RTLLIB';
REQUIRE 'RTLIN:COBDEF';
                     0092
0187
                                                                                                                ! Macros for psects
! Image file definitions
! COBOL specific RTL macros and literals
                     0188
0630
                     0631
0632
0633
0633
0636
0636
0637
0638
                                  MACROS
                                               -NONE
100
101
 102
103
                                      EQUATED SYMBOLS
                                                -NONE
105
106
107
                     0640
0641
0642
0643
0644
0645
0646
0647
0648
                                  ! PSECT DECLARATIONS:
108
109
110
111
                                   DECLARE_PSECTS (COB);
                                                                                                        ! Declare psects for COB$ facility
112
114
                                  ! EXTERNAL REFERENCES
115
116
117
                      0650
                                 EXTERNAL ROUTINE
LIB$STOP:NOVALUE,
COB$$FIND_NAME: ADDRESSING_MODE (GENERAL),
LIB$GET_EF: ADDRESSING_MODE (GENERAL),
LIB$FREE_EF: ADDRESSING_MODE (GENERAL),
COB$$RESTVA: ADDRESSING_MODE (GENERAL);
                     0651 1
0652 1
0653 1
118
119
120
121
122
123
124
                                                                                                                             ! Signal fatal error ! Find match for routine name
                     0654
0655
                                                                                                                             Obtain an event flag
Return an event flag
Restore virtual addrs
                     0656
0657
                                                                                                                              !/from image file
                      0658
```

Page 4 (2)

```
I 10
16-Sep-1984 00:01:01
14-Sep-1984 12:10:24
0667
                                 GLOBAL ROUTINE COBSCANCEL(DESC, LLIST): NOVALUE=
                     0668
                    0669
0670
                    0671
0672
0673
                                   FUNCTIONAL DESCRIPTION:
                                             This routine calls COB$$FIND_NAME to find the name of the program that is to be cancelled. If the entry is found, COB$CANCEL checks for open files so that they will be closed. It also checks if the routine has local storage, so it can restore it to its initial
                    0674
0675
                    0676
0677
                                             values.
                    0678
                                    CALLING SEQUENCE:
                    0679
                    0680
                                             COB$CANCEL (desc.rt.ds, llist.rr.r)
                    0681
                    0682
0683
                                    FORMAL PARAMETERS:
                    0684
0685
                                             DESC.rt.ds
                                                                      Address of descriptor for name
                    0686
                                             LLIST.rr.r
                                                                      Pointer to list of accessible local programs
                    0687
                    0688
                                    IMPLICIT INPUTS:
                    0689
                    0690
0691
0692
0693
0694
0695
0696
                                             NONE
158
159
                                    IMPLICIT OUTPUTS:
160
                                             NONE
162
163
164
165
                                    ROUTINE VALUE:
                    0698
                                             NONE
166
167
168
                    0699
                    0700
                                    COMPLETION CODES:
                    0701
                    0702
0703
0704
0705
0706
0707
0708
0709
169
                                             NONE
170
171
172
173
174
175
176
177
                                    SIDE EFFECTS:
                                             -Close any files that the CANCELed routine has open.
                                             -Restores any local storage
                    0710
0711
178
                                       BEGIN
179
                    0712
0713
180
181
182
183
184
185
186
187
188
189
                                          LOCAL
                    0714
0715
                                             EF,
STATUS,
                                                                                                 Event flag to use with COB$RESTVA
                                                                                                 Status returned by COB$RESTVA
                    0715
0716
0717
0718
0719
0720
0721
0722
0723
                                                                                               Address of counted block of
                                                         REF VECTOR,
                                                                                               !/RAB addresses
                                                         REF BLOCK [,BYTE], REF BLOCK [,BYTE],
                                                                                                 A particular RAB address
                                             RAB:
                                                                                                 Its associated FAB address
                                             FAB:
                                                                                                Address of name table entry
                                             P:
                                                          REF BLOCK[,BYTE];
                                       BUILTIN
190
                                             CALLG.
```

```
J 10
16-Sep-1984 00:01:01
COBSCANCEL
1-014
                                                                                                  VAX-11 Bliss-32 V4.0-742
                                                                       14-Sep-1984 12:10:24
                                                                                                  [COBRTL.SRC]COBCANCEL.B32;1
                                   AP:
   192
                               P = CALLG(.AP, COB$$FIND_NAME);
                                                                       ! Find routine name match
   194
   195
                               IF .P NEQ 0
                                                                       ! If NEQ O, then match has been found
   196
197
                                 THEN
BEGIN
                                                                       ! Entry found
   198
  ! Find out if he has any files open and if so, close them
                                        Q = .P[COB$A_NAM_FILES];
                                                                         Address of counted list of
                                                                         RAB address (if any)
                                        IF .Q NEQA O
                                                                         If it points non-zero assume
                                                                         there are some
                                        THEN
                                            BEGIN
                                                                         files exist case
                                                 INCR I FROM 1 TO .Q[0] DO
                                                     BEGIN
                                                                       ! of closing loop
                                                                .0[.1]
                                                          RAB =
                                                                                                  ! A RAB address
                                                             .RABERAB$W_ISI] NEQ O
                                                          I F
                                                          THEN
                                                              BEGIN
                                                                  FAB = .RAB[RAB$L FAB];
IF .FAB[FAB$W IF] NEQ 0
THEN $CLOSE (FAB = .FAB);
                                                                                                    Its FAB address
                                                                                                  ! then close it
                                                              END
                                                     END :
                                                                                                  ! End of closing loop
                                            END:
                 0756
                                   IF _P[COB$L_NAM_LLEN] NEQ 0
                                                                                         ! Length of local storage for module
                                      THEN
                 0758
                                        BEGIN
                                                                                         ! It has local storage
                 0759
                                          LOCAL
                 0760
                                            INADR: VECTOR[2];
                 0761
                 0762
0763
                                          Restore is image space. Load addresses of beginning of local
                  0764
                                          storage for the module and of end of local storage for module.
                  0765
                 0766
                  0767
                                        INADR[0] = .P[COB$A_NAM_LOCAL];
INADR[1] = .P[COB$A_NAM_LOCAL] + .P[COB$L_NAM_LLEN] - 1;
                  0768
                  0769
                                          Get an event flag number to use. If one was not obtained,
                                          then invoke SIGNAL_STOP indicating this condition.
                 0774
0775
                                        IF ( NOT LIB$GET_EF (EF) ) THEN SIGNAL_STOP (COB$_FAIGET_EF) ;
                  0776
                  0777
```

! Restore virtual addresses.

0778 0779 0780 Page

```
16-Sep-1984 00:01:01
COB$CANCEL
                                                                                                                 VAX-11 Bliss-32 V4.0-742
                                                                                  14-Sep-1984 12:10:24
1-014
                                                                                                                                                                      (3)
                                                                                                                 [COBRTL.SRC]COBCANCEL.B32:1
                                              STATUS = COB$$RESTVA(INADR, .CHANNEL, .EF);
IF NOT .STATUS THEN LIB$STOP(COB$ CANFAIL, 1, .DESC, .STATUS);
   24901235545678901
24901235545678901
                    0782
0783
                    0784
                    0785
                                              ! Deallocate event flag number.
                    0786
0787
                    0788
                                              IF ( NOT LIB$FREE_EF (EF) ) THEN SIGNAL_STOP (COB$_FATINTERR) ;
                    0789
                    0790
                                         END
                    0791
                                    ELSE
                    0792
0793
                                                                                                       ! Entry not found
                                              SIGNAL_STOP (COBS_CANFAIL, 1, .DESC );
                    0794
                    0795
                                    END:
                                                                                                       ! End of routine COB$CANCEL
                                                                                               .TITLE
                                                                                                         COB$CANCEL
                                                                                                         11-0141
                                                                                               .IDENT
                                                                                                         _COB$DATA,NOEXE, PIC.2
                                                                                               .PSECT
                                                                             00000 CHANNEL: BLKB
                                                                                                        LIB$STOP, COB$$FIND NAME
LIB$GET_EF, LIB$FREE_EF
COB$$RESTVA, COB$_CANFAIL
COB$_FAIGET_EF, COB$_FATINTERR
                                                                                               .EXTRN
                                                                                               .EXTRN
                                                                                               .EXTRN
                                                                                               .EXTRN
                                                                                                         SYS$CLOSE
                                                                                               .EXTRN
                                                                                                         _COB$CODE,NOWRT, SHR, PIC,2
                                                                                               .PSECT
                                                                                                         COB$CANCEL, Save R2,R3,R4,R5,R6,R7,R8 #COB$ CANFAIL, R8 LIB$STOP, R7
                                                                      01FC 00000
                                                                                               .ENTRY
                                                                                                                                                                    0667
                                                      0000000G
                                                                         DÓ
                                                                                               MOVL
                                                                             00002
                                                  57
                                                      00000000G
                                                                    00
                                                                         9E
                                                                             00009
                                                                                               MOVAB
                                                                                                         #12, SP
(AP), COB$$FIND_NAME
RO, P
                                                  ŠE
                                                                    0C
                                                                         ĆŽ
                                                                             00010
                                                                                               SUBL 2
                                                  00
52
                                                                                                                                                                    0726
                                    0000000G
                                                                    60
                                                                         FA
                                                                             00013
                                                                                               CALLG
                                                                    50
                                                                         DO
                                                                             0001A
                                                                                               MOVL
                                                                    03
                                                                             0001D
                                                                                               BNEQ
                                                                                                                                                                    0728
                                                                 008B
                                                                         31
                                                                                               BRW
                                                                                                         7$
                                                                             0001F
                                                                                                                                                                    0736
                                                             14
                                                                             00022 15:
                                                                                               MOVL
                                                                                                         20(P), Q
                                                  56
                                                                         DO
                                                                                                                                                                    0739
                                                                         13
                                                                             00026
                                                                                                         45
                                                                                               BEQL
                                                                    53
                                                                         D4 00028
                                                                                                                                                                    0743
                                                                                               CLRL
                                                                             AS000
                                                                                               BRB
                                                                                                         3$
                                                                    1₿
                                                                         11
                                                                 6643
                                                                             00020 25:
                                                                                                                                                                    0745
                                                                         DO
                                                                                               MOVL
                                                                                                         (Q)[1], RAB
                                                  54
                                                                             00030
                                                                                                         2(RAB)
                                                                                                                                                                    0746
                                                             02
                                                                         B5
                                                                                               TSTW
                                                                                                         35
                                                                    12
                                                                         13
                                                                             00033
                                                                                               BEQL
                                                             3C
02
                                                                                                                                                                    0749
                                                                             00035
                                                                                                         6u(RAB), FAB
                                                  55
                                                                         D0
                                                                                               MOVL
                                                                    A4
                                                                                                         2(FAB)
3$
                                                                    A5
                                                                             00039
                                                                                               TSTW
                                                                                                                                                                    0750
                                                                         B5
                                                                    09
                                                                             00030
                                                                         13
                                                                                               BEQL
                                                                                                                                                                    0751
                                                                             0003E
                                                                         DD
                                                                                               PUSHL
                                                                                                         FAB
                                                                                                         #1, SYS$CLOSE
(Q), I, 2$
12(P)
                                    0000000G
                                                  00
53
                                                                    01
                                                                             00040
                                                                                               CALLS
                                                                         FB
                                                                                                                                                                    0743
                                E1
                                                                             00047 35:
                                                                                               AOBLEQ
                                                                    66
                                                              00
                                                                    A2
67
                                                                         D 5
                                                                             0004B 4$:
                                                                                               TSTL
                                                                                                                                                                    0756
                                                                             0004E
                                                                                                         8$
                                                                                               BEQL
                                           04
10
                                                  AE
AE
                                                                    A2
A2
                                                                             00050
                                                                                                         16(P), INADR
12(P), 16(P), R2
                                                                                                                                                                    0767
                                                              10
                                                                         DO
                                                                                               MOVL
```

52

00

**C1** 

00055

ADDL3

0768

					16 14	10 5-Sep-19 4-Sep-19	)84 00:01 )84 12:10	:01	Page 8 (3)
08	AE	FF	A2	9E 0	005B		MOVAB	-1(R2), INADR+4	; 0775
0000000G	00 09	00000000	5E 01 50	FB 0	0060 0062 0069		PUSHL CALLS BLBS	SP W1, LIB\$GET_EF R0, 5\$	0775
	67	0000000G	8F 01	DD 0	006C 0072 0075	_	PUSHL Calls	#COBS_FAIGET_EF #1, LIB\$STOP EF	;
	7E	00000000	6E EF AE	3C 0	0075 0077 007E	5\$:	PUSHL MOVZWL PUSHAB	EF CHANNEL, -(SP) INADR	0781
0000000G	00 00		AE 03 50 50 AC	FB 0	0081 0088 0088		CALLS BLBS PUSHL	#3, COB\$\$RESTVA STATUS, 6\$ STATUS	0782 0783
		04	ÁČ	DD O	008D		PUSHL	DESC	<b>:</b>
	67		01 58 04 5E	DD O	0090 0092 0094	40.	PUSHL PUSHL CALLS	W1 R8 W4, LIB\$STOP SP	0782
0000000G	00 14	00000000	01 50	FB 0	0097 0099 00A0	<b>6\$</b> :	PUSHL CALLS BLBS	#1, LIB\$FREE_EF RO, 8\$	; 0788
	67	000000006	8F 01	FB 0	00A3 00A9 00AC		PUSHL LALLS RET	#COB\$_FATINTERR #1, LIB\$STOP	0728
		04	AC 01 58 03	DD O	00AD 00B0 00B2	<b>7\$</b> :	PUSHL PUSHL PUSHL	DESC #1 R8	: 0793
	67		Ó3	FB 0	00B4 00B7	8\$:	CALLS	W3, LIB\$STOP	0795

; Routine Size: 184 bytes. Routine Base: \_COB\$CODE + 0000

```
M 10
COBSCANCEL
1-014
                                                                                           16-Sep-1984 00:01:01
14-Sep-1984 12:10:24
                                                                                                                             VAX-11 Bliss-32 V4.0-742 [COBRTL.SRC]COBCANCEL.B32;1
                                                                                                                                                                                Page
                      0796
0797
                                  ROUTINE COBSSCANC_INIT: NOVALUE=
    0798
                       0799
                       0800
                                    FUNCTIONAL DESCRIPTION:
                       0801
                                    Called as LIB$INITIALIZE routine whenever the COB$CANCEL module is loaded, with the standard CLI activation argument list. It saves the channel number on which the image file is open in the OWN variable CHANNEL. This will be needed by the COB$CANCEL routine.
                       0806
                      0807
                      0808
                                    FORMAL PARAMETERS:
                      0809
                      0810
                                             NONE
                      0811
                      0812
    IMPLICIT INPUTS:
                      0814
                                             NONE
                      0815
                      0816
0817
                                     IMPLICIT OUTPUTS:
                      0818
                                             NONE
                      0819
                      0820
                                     ROUTINE VALUE:
                      0821
                      0822
                                             NONE
                      0824
                                     COMPLETION CODES:
                      0825
                      0826
                                             NONE
                      0828
                                    SIDE EFFECTS:
                      0829
                      0830
                                             NONE
                      0831
                      0832
0833
                      0834
                      0835
                                       BEGIN
                      0836
0837
                                          BUILTIN
                      0838
                      0839
                                        CHANNEL = .BLOCK[.BLOCK[.AP, CLISA_IMGFILED; , BYTE], IFDSW_CHAN; , BYTE];
                      0840
                                        END:
                                                                              0000 00000 COBSSCANC INIT:
                                                                                                                    Save nothing
                                                                                DO 00002
BO 00006
04 0000E
                                                                                                                    16(AP), RO
8(RO), CHANNEL
                                                                    10
08
                                                                                                         MOVL
                                        00000000
                                                                           A0
                                                                                                         MOVW
                                                                                                         RET
; Routine Size: 15 bytes.
                                          Routine Base: _COB$CODE + 00B8
```

(4)

0796

0839

0840

-- Symbols -----

9

Percent

0

Loaded

Pages

1000

Mapped

**Processing** 

00:01.4

Time

Library Statistics

Total

18619

file

\_\$255\$DUA28:[SYSLIB]LIB.L32;1

Page 10

(4)

VAX-11 Bliss-32 V4.0-742 [COBRTL.SRC]COBCANCEL.B32:1

Page 11 (4)

COMMAND QUALIFIERS

BLISS/CHECK=(FIELD, INITIAL, OPTIMIZE)/NOTRACE/LIS=LIS\$: COBCANCEL/OBJ=OBJ\$: COBCANCEL MSRC\$: COBCANCEL/UPDATE=(ENH\$: COBCANCEL

; Size: 199 code + 6 data bytes ; Run Time: 00:06.3 ; Elapsed Time: 00:29.4 ; Lines/(PU Min: 8248 ; Lexemes/(PU-Min: 23933 ; Memory Used: 110 pages ; Compilation Complete 0061 AH-BT13A-SE VAX/VMS V4.0

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